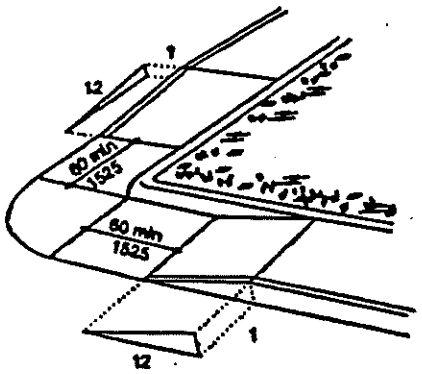
14.2 Sidewalks

signage, and street identification signs shall comply with 4.30.2, 4.30.3, and 4.30.5.

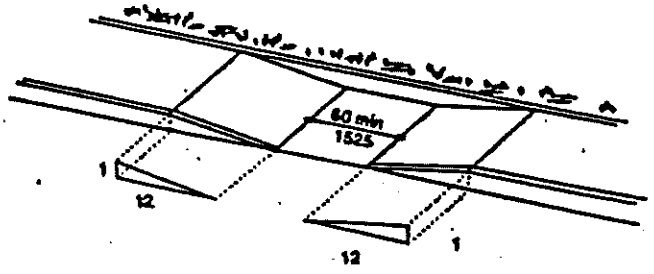
14.2.4* Protruding Objects.

(1) General. Objects projecting from walls (e.g., signs, telephones, canopies) with their leading edges between 27 in and 80 in (685 mm and 2030 mm) above the finished sidewalk shall protrude no more than 4 in (100 mm) into any portion of a sidewalk. Objects mounted with their leading edges located less than 27 in (685 mm) or more than 80 in (2030 mm) above the finished sidewalk may project any amount provided that they do not reduce the required continuous passage along the sidewalk. Free-standing objects mounted on posts or pylons may overhang their mountings a maximum of 12 in (305 mm) when located between 27 in and 80 in (685 mm and 2030 mm) above the ground or finished sidewalk provided that they do not reduce the required continuous passage along the sidewalk.

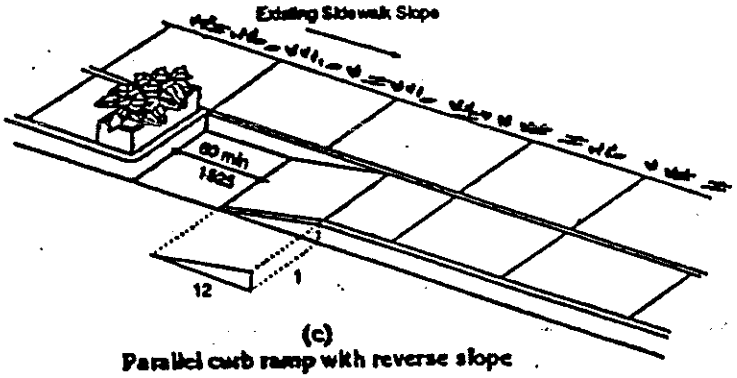
(2) Head Room. Guardrails or other barriers shall be provided when the vertical clearance of an area along or adjoining a sidewalk or continuous passage is less than 80 in (2030 mm) high. Leading edges of such barriers shall be located a maximum of 27 in (685 mm) above the finished sidewalk, as shown in Figure 8(c-1).



(a)
Parallel curb ramp in narrow sidewalk at intersection



(b)
Parallel curb ramp in narrow sidewalk at midblock crossing



(c)
Parallel curb ramp with reverse slope

Fig. 58
Examples of Parallel Curb Ramps

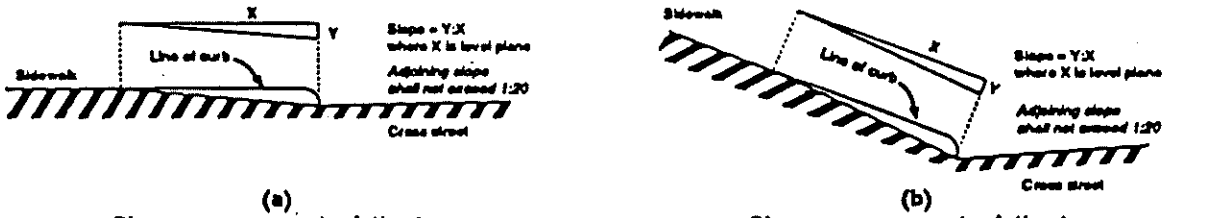


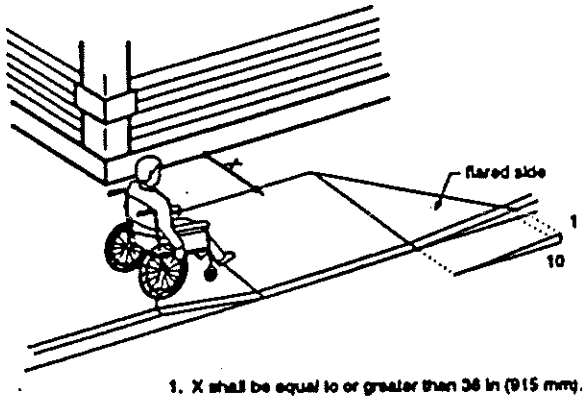
Fig. 59

Measurement of Curb Ramp Slopes

(3) Clear Width. Fixed objects not covered by paragraph (1) shall not reduce the continuous passage required by 14.2.1.

14.2.5 Sidewalk Curb Ramps and Other Sloped Areas.

(1) Location. A curb ramp or other sloped area complying with 14.2.5 shall be provided wherever a pedestrian circulation path crosses a curb or other barrier (e.g., parkway, berm, or gutter) to a street crossing and shall be connected to a continuous passage. Handrails are not required on sidewalk curb ramps or other sloped areas connecting to street crossings.



1. X shall be equal to or greater than 36 in (915 mm).

2. If X is less than 48 in (1220 mm), then the slope of the flared sides shall not exceed 1:12.

Fig. 60

Level Landing at Top of Curb Ramp

(2) Slope. The least possible slope shall be used for any curb ramp or other sloped area. The maximum slope shall be 1:12 when measured as shown in Figure 59(a).

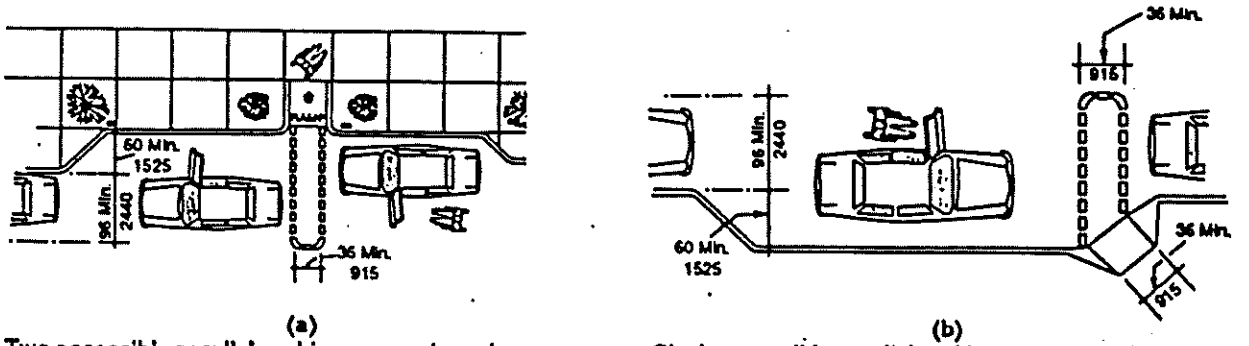
EXCEPTION: Where site infeasibility (e.g., steeply sloped roadways or constrained right-of-way) precludes the installation of a curb ramp, a sloped area parallel to the curb with its gradient measured according to Figure 59(a), may be provided. (See Fig. 58). The least possible slope shall be provided for any parallel sloped area. The maximum slope shall be 1:12. The cross slope shall be no greater than 1:50 (2 percent). A landing which has a minimum of 60 in (1525 mm) clear in the direction of the running slope shall be provided at the bottom of the sloped area. The surface slope of the landing shall not exceed 1:50 (2 percent) in all directions.

(3) Width. Curb ramps or other sloped areas shall be 36 in (915 mm) wide minimum, exclusive of flared sides.

(4) Landings. A landing the width of the curb ramp and 48 in (1220 mm) in length shall be provided at the top of the curb ramp or other sloped area and shall be connected to the continuous passage. The surface slope of landings shall not exceed 1:50 (2 percent) in all directions.

EXCEPTION 1: Where site infeasibility precludes the installation of a 48 in (1220 mm) landing length at the top of the curb ramp or other sloped area, a landing a minimum of 36 in (915 mm) in length may be provided. (See Fig. 60).

14.2 Sidewalks



(a)
Two accessible parallel parking spaces in series, separated by an access aisle, with both driver-side and passenger-side access demonstrated.

(b)
Single accessible parallel parking space with driver-side access demonstrated; passenger side access can be provided by parking in line with standard on-street spaces.

Fig. 61
Examples of Parallel On-Street Parking

EXCEPTION 2: Where the 36 in (915 mm) level landing allowed in Exception 1 above, or a parallel ramp complying with 14.2.5(2) Exception cannot be provided, a sloped area connecting to the street crossing with its gradients (i.e., running slope, cross slope, side flare slope) measured from a plane parallel to that of the street, as shown in Figure 59(b), may be provided. The least possible slope shall be used for any sloped area connecting to a street crossing. The maximum slope shall be 1:12. The cross slope shall be no greater than 1:50 (2 percent).

(5) Sides of Curb Ramps or Other Sloped Areas. Curb ramps or other sloped areas located where pedestrians must walk across the ramp, or where curb ramps are not protected by returned curbs, shall have flared sides. The slope of the flare shall be 1:10 maximum. Where the landing at the top is at least 36 in (915 mm) but less than 48 in (1220 mm), the slope of the flares shall be 1:12 maximum. (See Fig. 60). Curb ramps or other sloped areas with returned curbs may be used where pedestrians would not normally walk across the ramp from the side. (See Fig. 12(b)).

(6) Surface. The surfaces of curb ramps or other sloped areas shall be firm, stable and slip resistant.

(7) Detectable Warnings. [Reserved]

(8) Adjacent Surfaces. Counter slopes of adjoining gutters and road surfaces connecting to the curb ramp or sloped area shall be 1:20 maximum. (See Fig. 59(a)). Transitions from curb ramps to gutters or streets shall be flush and free of abrupt changes. Gratings located in adjacent walking surfaces shall have spaces no greater than 1/2 in (13 mm) wide in one direction. (See Fig. 8(g)). Gratings with elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel. (See Fig. 8(h)).

(9) Location at Marked Crossings. Curb ramps and other sloped areas at marked crossings shall be wholly contained within the markings, excluding any flared sides. (See Fig. 15).

(10) Obstructions. Curb ramps and other sloped areas shall be protected or located to prevent their obstruction by parked vehicles.

(11) Built-up Curb Ramps or Other Sloped Areas. Built-up curb ramps or other sloped areas shall be located so that they do not project into vehicular traffic lanes or into parking spaces or access aisles. (See Fig. 13).

(12) Diagonal Curb Ramps or Other Sloped Areas. Diagonal (or corner-type) curb ramps or other sloped areas with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. Bottoms of

diagonal curb ramps or other sloped areas shall have a 48 in (1220 mm) minimum clear space as shown in Figure15(c) and (d). Diagonal curb ramps or other sloped areas provided at marked crossings shall have the 48 in (1220 mm) minimum clear space within the markings. (See Fig. 15(c) and (d)). Diagonal curb ramps or other sloped areas with flared sides shall have a segment of straight curb at least 24 in (610 mm) long located on each side of the curb ramp or other sloped area and within the marked crossing. (See Fig. 15(c)).

(13) Islands. Raised islands in crossings shall be cut through level with the street or have curb ramps or other sloped areas at both sides and a level area 48 in (1220 mm) long minimum and a minimum of 36 in (915 mm) wide in the part of the island intersected by the crossings. (See Fig. 15(a) and (b)).

14.2.6 Crossing Controls.

(1) Controls. Where provided, buttons shall be raised or flush and be a minimum of 3/4 in (19 mm) in the smallest dimension. The force required to activate controls shall be no greater than 5 lbf (22.2N).

(2) Location. Where provided, controls shall be located as close as possible to the curb ramp and, to the maximum extent feasible, shall permit operation from a level area immediately adjacent to the controls.

(3) Mounting Height. Where provided, pedestrian-actuated crossing controls shall be a maximum of 48 in (1220 mm) above the sidewalk.

(4) Surface. A firm, stable and slip resistant area a minimum of 30 in by 48 in (915 mm by 1220 mm) shall be provided to allow for a forward or parallel approach to the controls.

14.2.7* Marked Crossings. Where provided, marked crossings shall be delineated with contrasting markings or materials (e.g., paint, brick, tile).

14.2.8 Pedestrian Overpasses and Underpasses. Grade-separated pedestrian overpasses and underpasses shall be connected to a sidewalk or other pedestrian circulation path by means of a ramp or elevator complying with 4.8 or 4.10 or, where permitted by 4.1.3(5), a platform lift (wheelchair lift) complying with 4.11.

14.3* Drinking Fountains, Telephones, Toilet Facilities, Fixed Seating, Tables and Benches. Where provided on or adjacent to a sidewalk as part of a public improvement project, the following elements shall be reasonably dispersed within the project area, taking into consideration the proximity and number of existing accessible elements:

(1) Drinking Fountains. At least 50 percent, but not less than one, of each drinking fountain provided shall comply with 4.15. Where only one drinking fountain is provided it shall be accessible to individuals who use wheelchairs in accordance with 4.15 and to those who have difficulty bending or stooping. This can be accomplished by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible under 4.15 and a water cooler, or by other such means as would achieve the required accessibility for each group.

(2) Public Pay Telephones. Where single unit public pay telephones are provided, at least 50 percent, but not less than one, shall comply with 4.31.2 through 4.31.8. Where a bank of telephones (two or more adjacent public telephones, often installed as a unit) is provided, at least one telephone per bank shall comply with 4.31.2 through 4.31.8. Where two or more banks of telephones are provided, at least one telephone complying with 4.31.2 through 4.31.8 shall be mounted with the highest operable part no higher than 48 in (1220 mm). In addition, 25 percent, but not less than one, of all other public telephones provided shall be equipped with a volume control and shall be dispersed among all types of public telephones. Signage complying with applicable provisions of 4.30.7 shall be provided.

(3) Single User Toilet Facilities. At least 50 percent, but not less than one, of fixed single user toilet facilities shall comply with 4.22. Signage complying with 4.30.7 shall be provided on accessible units. In addition, signage complying with 4.30.2, 4.30.3, and 4.30.5 shall be provided on the inaccessible units indicating the location of the nearest accessible unit.